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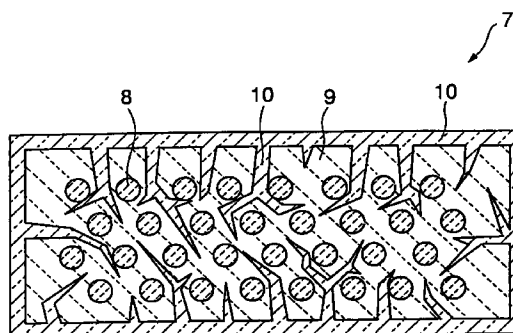
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**(54) Glass-impregnated fiber-reinforced ceramic and method of manufacturing the same**

(57) A glass-impregnated, fiber-reinforced ceramic comprises a ceramic matrix having open voids, inorganic fibers embedded in the ceramic matrix in a regular or irregular orientation, and a glass matrix filling up the open voids in the ceramic matrix. The glass-impregnated, fiber-reinforced ceramic is manufactured by a manufacturing method comprising the steps of forming a fiber-reinforced ceramic comprising the ceramic matrix having open voids, and inorganic fibers embedded in the ceramic matrix, impregnating the fiber-reinforced ceramic with a glass precursor solution containing a glass precursor to stop up the open voids of the ceramic matrix with the glass precursor solution, and subjecting the fiber-reinforced ceramic impregnated with the solution to a heat treatment.



**FIG. 1**

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## EUROPEAN SEARCH REPORT

Application Number  
EP 98 10 4926

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	EP 0 452 275 A (BATTELLE MEMORIAL INSTITUTE) 16 October 1991 * page 3, line 26 - line 45 * * page 5, line 1 - line 29; claims 1-18; example 6 * ---	1-8	C04B35/80 C04B41/86
X	US 5 102 698 A (SOCIETE EUROPEENNE DE PROPULSION) 7 April 1992 * column 1, line 59 - column 3, line 19; claims 1-12; example 1 * ---	1-5	
X,P	US 5 622 751 A (SOCIETE EUROPEENNE DE PROPULSION) 22 April 1997 * column 4, line 36 - column 5, line 3; claims 1-15; examples 1,3,4 * * column 3, line 38 - line 65 * ---	1-5	
X,P	US 5 725 955 A (SOCIETE EUROPEENNE DE PROPULSION) 10 March 1998 * column 2, line 27 - line 59; claims 1-20; example 1 * -----	1-5	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			C04B
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>20 August 1998</b>	Examiner <b>Luethe, H</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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